

# Hands-On AC Drive Trouble Shooting Seminar

Hosted by:

**HURON  
CAMPUS**

IN CONJUNCTION WITH



**MEDIUM & LOW VOLTAGE DRIVES**

Monday, April 8 - Tuesday, April 9, 2019

Location: Huron Campus

1701 North Street, Endicott NY 13760

One of the most common inquiries we get at EMA Inc. is for training on AC Solid-State Motor Drives.

Often it's not cost effective to have us teach on-site schools for small groups.

**Here is a VERY cost-effective solution.**

## **Who should attend?**

ANYONE troubleshooting, maintaining, applying or operating AC variable speed motor drives.

You'll leave this school with a clear & practical understanding of solid-state AC drives, motors and the mechanical/electrical interaction which takes place.

You'll learn to recognize classic drive trouble symptoms and quickly resolve common problems. This seminar could **easily** return your investment with just **one** instance of reduced downtime due to your increased knowledge.

An electronic background will be helpful, but not essential; we'll review the basic electrical laws and component operation you need to know.

## ~ DAY ONE ~

Safety

Drive Application Basics

- Horsepower/Torque
- Load Types
- Typical Applications, Pitfalls and Troubleshooting
- Harmonics and Noise

Test Equipment and Measuring Methods

- Component Testing
- Voltage/Current Measuring Methods,
- Problems and Considerations of Non-sinusoidal Waveforms
- Oscilloscope Basics and Safety Considerations

Discrete Components and Typical Circuits Overview

- Passive Components (capacitors, diodes)
- Active Components (transistors, IGBT's etc.) & Associated Circuits
- Inductors, Transformers
- Electrical Laws

## ~ DAY TWO ~

AC Motors

- Construction & Theory of Operation (Induction)
- Connections & Testing

AC Drives

- Construction & Theory of Operation (PWM)
- Braking Types (Dynamic, DC Injection, Line Regenerative)
- Programming
  - User Interface (I/O)
  - Drive, Motor, and Load Data
- Faults & Troubleshooting
- Visual & Test Equipment Diagnosis
- Typical Application Problems
- Maintenance

**Contact Rebecca today to reserve your spot!**

607-756-0424 or [rebeccaz@emainc.net](mailto:rebeccaz@emainc.net)

**\$695.00 Per attendee** *Cost covers tuition, class materials, lunch only*

**Cancellation Policy:** EMA reserves the right to cancel a scheduled class at anytime due to low enrollment. In this situation the student will be asked to reschedule, or the tuition cost will be refunded. EMA is not liable for any charges incurred by the customer (i.e. airline, hotel, and rental car) due to cancellation. Payment is required at the time of registration. Cancellation fee for customers: if canceling within 1 week of the scheduled class is 100% of the total.